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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,755	03/30/2000	Yukio Sugimura	P107314-00001	8434

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Arent Fox Kintner Plotkin & Kahn PLLC
1050 Connecticut Avenue NW
Suite 600
Washington, DC 20036-5339

EXAMINER	
NGUYEN, HUY THANH	
ART UNIT	**PAPER NUMBER**
2615	

DATE MAILED: 05/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/537,755	SUGIMURA ET AL.	
	Examiner	Art Unit	
	HUY T NGUYEN	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) *7-13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-6 in Paper No. 6 filed 26 February 2004 is acknowledged. Accordingly claims 7-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Ono et al (6,314,137).

Regarding claim, Ono discloses an image recording apparatus (Figs. 1 and 9-11, column 24, lines 24-45)) comprising:

image compression means (MPEG encoding means 11) ;

means for storing in a memory input image data as basic image data in a period of a predetermined number of fields as well as feeding the input image data to the image compression means (column 12, line 57 –68 and column 13;

means for finding, with respect to each of the input image data corresponding to the fields between the field corresponding to the input image data which has been stored in the memory and the field corresponding to the input image data which is to be subsequently stored in the memory (the diiference between the video filed of one camera and another camera), the difference between the input image data and the basic image data which has been most newly stored in the memory, and feeding data representing the obtained difference to the image compression means (column 13); and

means for recording on a recording medium compressed data for each field which has been compressed by the image compression means, together with identification information indicating whether the compressed data corresponds to the basic image data (Intra- field) or the difference data (inter- field) (column 5, line 60 to column 6, line 5, column 14).

Regarding claim 2, Ono further teaches an image reproducing apparatus for reproducing the data which has been recorded on the recording medium by the image recording apparatus,(column 15, lines 5-68, column 16, lines 1-10) comprising:

means for reading the compressed data and the identification information from the recording medium;

image expansion means (MPEG decoding means) for expanding for each field the compressed data which has been read from the recording medium arid returning the expanded compressed data to the data which has not been compressed by said image compression means;

means for judging whether the data for each field which has been expanded by the image expansion means is the basic image data or the difference data on the basis of the identification information;

means for storing, when the data for each field which has been expanded by the image expansion means is the basic image data, the basic image data in the memory as well as outputting the basic image data as reproduced image data; and

means for restoring, when the data for each field which has been expanded by the image expansion means is the difference data, the original image data on the basis of the difference data and the basic image data which has been most newly stored in the memory, and outputting the obtained image data as reproduced image data (columns 6 and 15).

Regarding claim 3, Ono teaches an image recording/reproducing apparatus (figs. 1, 14) comprising a recording apparatus and a reproducing apparatus, wherein the recording apparatus comprises image compression means (MPEG encoding means), means for storing in a memory input image data as basic image data in a period of a predetermined number of fields as well as feeding the input image data to the image compression means, means for finding, with respect to each of the input image data corresponding to the fields between the field corresponding to the input image data which has been stored in the memory and the field corresponding to the input image data which is to be subsequently stored in the memory, the difference between the input image data and the basic image data which has been most newly stored in the memory, and feeding data representing the obtained difference to the image compression

means, and means for recording on a recording medium compressed data for each field which has been compressed by the image compression means, together with identification information indicating whether the compressed data corresponds to the basic image data or the difference data (column 12, lines 60-68, columns 13 and 14), and the reproducing apparatus (column 15 and 16) comprises means for reading the compressed data and the identification information from the recording medium, image expansion means for expanding for each field the compressed data which has been read from the recording medium and returning the extracted compressed data to the data which has not been compressed by said image compression means, means for judging whether the data for each field which has been expanded by the image expansion means is the basic image data or the difference data on the basis of the identification information, means for storing, when the data for each field which has been expanded by the image expansion means is the basic image data, the basic image data in the memory as well as outputting the basic image data as reproduced image data, and means for restoring, when the data for each field which has been expanded by the image expansion means is the difference data, the original image data on the basis of the difference data and the basic image data which has been most newly stored in the memory, and outputting the obtained image data as reproduced image data (column 15).

Regarding claim 4, Ono teaches image recording apparatus (Figs. 1 and 14) for recording on a recording medium a time division multiplex image signal obtained by subjecting image signals from a plurality of video cameras to time division multiplexing

and having information relating to the camera numbers of the video cameras respectively corresponding to fields included therein added thereto, comprising:

storage means (6,7,8,9) respectively provided in correspondence with the camera numbers (column 5, columns 13-14) ;

means for storing, for each group of fields assigned the same camera number which are included in the time division multiplex image signal, image data as basic image data in the storage means corresponding to the camera number assigned to the group of fields in a period of a predetermined number of fields as well as feeding the image data to the image compression means;

means for finding, in each group of fields assigned the same camera number which are included in the time division multiplex image signal, the difference between each of the image data corresponding to the fields between the field corresponding to the image data which has been stored in the storage means corresponding to the camera number assigned to the group of fields and the field corresponding to the image data which is to be subsequently stored in the corresponding storage means and the basic image data which has been most newly stored in the corresponding storage means (column 13) , and feeding data representing the obtained difference to the image compression means; and

means for recording on a recording medium each of compressed data for each field which have been compressed by the image compression means, together with identification information indicating whether the compressed data corresponds to the basic image data or the difference data and the camera number (column 14).

Regarding claim 5, Ono discloses an image reproducing apparatus for reproducing the data which has been recorded on the recording medium by the image recording apparatus comprising:

means for reading the compressed data, the identification information, and the camera number from the recording medium (column 15);

image expansion means (MPEG decoding means) for expanding for each field the compressed data which has been read from the recording medium and returning the expanded compressed data to the data which has not been compressed by said image compression means;

means for judging whether the data for each field which has been expanded by the image expansion means is the basic image data or the difference data on the basis of the identification information;

means (16,17,18,19) for storing, when the data for each field which has been expanded by the image expansion means is the basic image data, the basic image data in the storage means corresponding to the camera number corresponding to the basic image data as well as outputting the basic image data as reproduced image data; and

means for restoring, when the data for each field which has been expanded by the image expansion means is the difference data, the original image data on the basis of the difference data and the basic image data which has been most newly stored in the storage means corresponding to the camera number corresponding to the difference data, and outputting the obtained image data as reproduced image data (column 15).

Regarding claim 6, Ono teaches an image recording/reproducing apparatus comprising a recording apparatus (Figs. 1.9-11) for recording on a recording medium a time division multiplex image signal obtained by subjecting image signals from a plurality of video cameras to time division multiplexing and having information relating to the camera numbers of the video cameras respectively corresponding to fields included therein added thereto, and a reproducing apparatus for reproducing the data which has been recorded on the recording medium, wherein the recording apparatus comprises storage means (6,7,8,9) respectively provided in correspondence with the camera numbers, means for storing, for each group of fields assigned the same camera number which are included in the time division multiplex image signal, image data as basic image data in the storage means corresponding to the camera number assigned to the group of fields in a period of a predetermined number of fields as well as feeding the image data to the image compression means, means for finding, in each group of fields assigned the same camera number which are included in the time division multiplex image signal, the difference between each of the image data corresponding to the fields between the field corresponding to the image data which has been stored in the storage means corresponding to the camera number assigned to the group of fields and the field corresponding to the image data which is to be subsequently stored in the corresponding storage means and the basic image data which has been most newly stored in the corresponding storage means, and feeding data representing the obtained difference to the image compression means, and means for recording on a recording medium each of compressed data for each field which have been compressed by the

image compression means, together with identification information indicating whether the compressed data corresponds to the basic image data or the difference data and the camera number (column 14) , and the reproducing apparatus (Fig. 15-19, columns 15-16)) comprises means for reading the compressed data, the identification information, and the camera number from the recording medium, image expansion means (15) for expanding for each field the compressed data which has been read from the recording medium and returning the expanded compressed data to the data which has not been compressed by said image compression means, means for judging whether the data for each field which has been expanded by the image expansion means is the basic image data or the difference data on the basis of the identification information, means (16,17,18,19) for storing, when the data for each field which has been expanded by the image expansion means is the basic image data, the basic image data in the storage means corresponding to the camera number corresponding to the basic image data as well as outputting the basic image data as reproduced image data, and means for restoring, when the data for each field which has been expanded by the image expansion means is the difference data, the original image data on the basis of the difference data and the basic image data which has been most newly stored in the storage means corresponding to the camera number corresponding to the difference data, and outputting the obtained image data. as reproduced image data (columns 15 and 16).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamamoto and Kirsten discloses a apparatus for recording and reproducing the compressed images from a camera . Shiota et al teaches a apparatus for recording and reproducing time division multiplexed images from a plurality of cameras . Yagasaki et al and Yotomi et al teaches apparatus for compressing the image signal as intra-fileds and inter-fields.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (703) 305-4775. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H.N

HUY NGUYEN
PRIMARY EXAMINER